

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

NEO WIRELESS LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

Case No. 6:21-cv-00026-ADA

**APPLE INC.'S ANSWER TO PLAINTIFF'S FIRST AMENDED COMPLAINT**

Defendant Apple Inc. ("Defendant" or "Apple") hereby submits its Answer and Defenses to Plaintiff Neo Wireless's ("Plaintiff" or "Neo Wireless") First Amended Complaint ("FAC") for patent infringement. Unless specifically admitted, Apple denies each and every allegation made by Plaintiff in the FAC and states as follows:

**THE PARTIES**

**FAC No. 1:** Plaintiff Neo Wireless LLC is a Delaware corporation with its principal place of business located in Wayne, Pennsylvania.

**Answer to FAC No. 1:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 1, and therefore denies them.

**FAC No. 2:** On information and belief, Defendant Apple is a California corporation with its principal place of business located at One Apple Park Way, Cupertino, California 95014. Apple maintains several regular and established places of business in the Western District of Texas including at 12535 Riata Vista Circle and 5501 West Parmer Lane, Austin, Texas 78727; 2901 S. Capital of Texas Hwy, Austin, TX 78746; 3121 Palm Way, Austin, TX 78758; 8401 Gateway Boulevard West, El Paso, TX 79925; 15900 La Cantera Parkway, San Antonio, TX

78256; and 7400 San Pedro Avenue, San Antonio, TX 78216. Moreover, Apple maintains seventeen regular and established storefront Apple Stores across the state of Texas.<sup>1</sup> Apple offers and sells its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the judicial Western District of Texas, such as at the Barton Creek Mall (2901 S. Capital of Texas Hwy) and in the Domain (3121 Palm Way) in Austin, Texas. Apple may be served with process through its registered agent for service in Texas: CT Corporation System, 1999 Bryan Street, Suite 900, Dallas Texas 75201.

**Answer to FAC No. 2:** Apple admits that it is a California corporation with its principal place of business located at One Apple Park Way, Cupertino, California 95014. Apple also admits that there are Apple facilities in this judicial district, but denies that these locations have any connection to this case. Apple further admits that it may be served with process through its registered agent for service in Texas, CT Corporation System, at 1999 Bryan Street, Suite 900, Dallas Texas 75201. Whether Apple's facilities or retail stores constitute "regular and established places of business in the Western District of Texas" involves a question of statutory interpretation and/or conclusions of law to which no response is required. To the extent there are any remaining allegations in paragraph 2 of the FAC to which a response is required, Apple denies them.

**FAC No. 3:** On information and belief, seven of Apple's suppliers manufacture products, including those relevant to this Complaint, in the State of Texas. Cypress Semiconductor Corporation, Flex Limited, Samsung Electronics Company Limited, and Maxim Integrated Products Incorporated are all located within this judicial district. Hon Hai Precision

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<sup>1</sup> <https://www.apple.com/retail/storelist/>

Industry Company Limited (FoxConn) is located in the Dallas/Fort Worth metroplex.<sup>2</sup> On information and belief, Cypress Semiconductor, Apple's supplier, produces chips for use in Apple's Accused Instrumentalities in its Austin factory at Apple's direction and specification.<sup>3</sup> On information and belief, Flex Limited or Flextronics, Apple's supplier, assembles infringing products in its Austin factory at Apple's direction and specifications.<sup>4</sup> On information and belief, Hon Hai Precision Industry or Foxconn, Apple's primary assembly supplier, has two plants for Apple products located in Fort Worth, Texas. At least one of these plants is a repair factory for Apple's products, including infringing products.<sup>5</sup> On information and belief, Maxim Integrated, Apple's supplier, produces chips used in the Accused Instrumentalities in its San Antonio factory at Apple's direction and specifications.<sup>6</sup> On information and belief, Qorvo, Apple's supplier, produces radio frequency chips used in the Accused Instrumentalities in its Richardson factory location at Apple's direction and specifications.<sup>7</sup> On information and belief,

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<sup>2</sup> <https://www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf>.

<sup>3</sup> <https://www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf>; <https://www.investopedia.com/4-stocks-poised-to-gain-as-new-iphone-sales-beat-expectations-4769942>; <https://www.austinhomeseecker.com/cypress-semiconductor.php>; <https://9to5mac.com/2020/02/26/iphone-fixed-broadcom-chip-flaw/>.

<sup>4</sup> <https://www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf>; <https://www.bloomberg.com/news/articles/2020-04-04/apple-supplier-targets-production-of-30-000-ventilators-a-month>; <https://www.cnbc.com/2019/11/20/apple-ceo-tim-cook-and-preident-trump-tour-texas-computer-factory.html>.

<sup>5</sup> <https://www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf>; <https://focustaiwan.tw/sci-tech/201903090004>; <https://dallasinnovates.com/uta-teams-with-foxconn-to-help-reduce-iphone-fraudulent-claims1423/>.

<sup>6</sup> <https://www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf>; <https://appleinsider.com/articles/12/07/19/made-in-america-apples-supply-chain-increasing-us-production>; [https://en.wikipedia.org/wiki/Maxim\\_Integrated](https://en.wikipedia.org/wiki/Maxim_Integrated); <https://pdfserv.maximintegrated.com/en/pr/SanAntonio.pdf>.

<sup>7</sup> <https://www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf>; <https://www.forbes.com/sites/greatspeculations/2020/05/29/qualcomm-qorvo--jabil-apple-suppliers-have-been-left-behind-from-the-rally-time-to-buy/#677ea6942257>;

Samsung, Apple's supplier, designs and produces chips used in the Accused Instrumentalities in its Austin factory (as discussed in greater detail below) at Apple's direction and specifications.

**Answer to FAC No. 3:** Apple admits that certain of Apple's third-party suppliers have facilities located in this District, but denies that the location of Apple's third-party suppliers is sufficient to confer jurisdiction or venue. Apple also denies that the third-party suppliers referenced in paragraph 3 manufacture the core components needed to enable the accused functionalities. To the extent a response is required for the remaining allegations of paragraph 3 of the FAC, Apple denies them.

### **JURISDICTION AND VENUE**

**FAC No. 4:** This action includes a claim of patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 et seq. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

**Answer to FAC No. 4:** Apple admits that this action purports to arise under the United States patent laws. Apple admits that this Court has subject matter jurisdiction over patent law claims. Apple denies infringement and any and all relief Plaintiff is seeking.

**FAC No. 5:** This Court has personal jurisdiction over Apple. As indicated above, Apple conducts business and has committed acts of patent infringement and has induced and contributed to acts of patent infringement by others in this District, the State of Texas, and elsewhere in the United States.

**Answer to FAC No. 5:** Apple does not contest at this time, and solely for the purpose of the present litigation, whether Apple is subject to this Court's personal jurisdiction. The

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<https://www.fool.com/investing/2020/03/03/apple-supplier-qorvo-cuts-guidance-coronavirus.aspx>.

remaining allegations in paragraph 5 of the FAC constitute conclusions of law, and no response of Apple is required; to the extent an answer is required, Apple denies the allegations.

**FAC No. 6:** Venue is proper in this judicial district per 28 U.S.C. §§ 1391 and 1400(b).

**Answer to FAC No. 6:** Apple does not contest at this time, and solely for the purpose of the present litigation, the propriety of venue in this District, but Apple denies that venue in this District is convenient. Apple reserves the right to seek transfer to a more appropriate or convenient forum. To the extent there remain any other allegations in paragraph 6 of the FAC which do not constitute conclusions of law and to which a response is required, Apple denies the allegations.

**FAC No. 7:** Apple has committed acts of infringement in this judicial district and maintains regular and established places of business in this district, as set forth above. Apple has continuous and systematic business contacts with the State of Texas. Apple, directly or through subsidiaries or intermediaries (including distributors, retailers, contract manufacturers, and others), conducts its business extensively throughout Texas, by shipping, manufacturing, distributing, offering for sale, selling, and advertising (including the provision of interactive web pages) its products and services in the State of Texas and the Western District of Texas.

**Answer to FAC No. 7:** Apple admits that it sells and offers for sale certain products, including those accused in the FAC, to customers and potential customers in Texas, including in this District. Apple denies that venue in this District is convenient, and Apple reserves the right to seek transfer to a more appropriate or convenient forum. The remaining allegations in paragraph 7 constitute conclusions of law, and no response of Apple is required; to the extent an answer is required, Apple denies the allegations.

**FAC No. 8:** Apple, directly or through subsidiaries or intermediaries (including distributors, retailers, contract manufacturers, and others), has purposefully and voluntarily placed its infringing products and services into this District and into the stream of commerce with the intention and expectation that they will be purchased and used by consumers in this District. Apple has offered and sold and continues to offer and sell these infringing products and services in this District, including at its seventeen physical Apple stores located within the state and more specifically those stores located in this District such as at 5501 West Parmer Lane, Austin, Texas, 2901 S. Capital of Texas Hwy, Austin, TX 78746; 3121 Palm Way, Austin, TX 78758; 8401 Gateway Boulevard West, El Paso, TX 79925; 15900 La Cantera Parkway, San Antonio, TX 78256; and 7400 San Pedro Avenue, San Antonio, TX 78216.<sup>8</sup> Moreover, Apple has authorized its infringing products to be sold by numerous third-party sellers. For example, Apple's website indicates at least 99 stores sell infringing iPhones in Austin,<sup>9</sup> at least 99 stores sell infringing iPhones in the Waco area,<sup>10</sup> and at least 99 stores sell infringing iPhones in San Antonio.<sup>11</sup> Put simply, Apple has authorized hundreds of stores located in the Western District of Texas to sell infringing products to customers and other end-users.

**Answer to FAC No. 8:** Apple admits that it sells and offers for sale certain products, including those accused in the FAC, to customers and potential customers in Texas, including in this District. Apple also admits that there are Apple facilities in this judicial district, but denies that these facilities have any connection to this case. Apple denies that venue in this District is

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<sup>8</sup> <https://www.apple.com/retail/storelist/>.

<sup>9</sup> <https://locate.apple.com/sales/?pt=3&lat=30.2642643&lon=-97.7475016&address=Austin>.

<sup>10</sup> <https://locate.apple.com/sales/?pt=3&lat=31.558389&lon=-97.129989&address=Waco>.

<sup>11</sup> <https://locate.apple.com/sales/?pt=3&lat=29.424586&lon=-98.49464&address=San%20antonio>.

convenient, and Apple reserves the right to seek transfer to a more appropriate or convenient forum. The remaining allegations in paragraph 8 constitute conclusions of law, and no response of Apple is required; to the extent an answer is required, Apple denies the allegations.

**FAC No. 9:** Apple has committed acts of infringement in this judicial district and has a regular and established place of business in this judicial district. Apple declared in September 2019 a “newly redesigned Mac Pro” would be manufactured in a factory in Austin, where Mac Pro has been made since 2013. According to supply chain sources, Apple is going to launch a 5G Mac Pro in the second half of 2020 that will be manufactured in its Austin manufacturing plant.<sup>12</sup> In 2018, Apple announced an expansion of its operations in Austin, including an investment of \$1 billion to build a new campus. To date, Apple’s campus houses over 8,000 employees with the capacity to grow to upwards of 15,000 employees, some of which have relevant knowledge of the accused technology. For example, Apple recently published an Austin job posting for a Baseband HW Design Engineer to be a part of their design team responsible for “architecture, design, implementation, and integration of the baseband systems for all Apple products.”<sup>13</sup> This expansion has made Apple the largest private employer in the city of Austin and contributed to the significant increase of Apple engineers located in Austin. The campus’s functions include engineering, R&D, operations, finance, sales and customer support.<sup>14</sup> Apple’s

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<sup>12</sup> <https://www.apple.com/newsroom/2019/09/apples-new-mac-pro-to-be-made-in-texas/>;  
<https://www.apple.com/newsroom/2019/11/apple-expands-in-austin/>;  
<https://www.digitimes.com/news/a20190802PD207.html>;  
<https://www.macrumors.com/2019/08/02/apple-to-launch-macbooks-with-5g-2h-2020/>;

<sup>13</sup> <https://jobs.apple.com/en-us/details/200163864/baseband-hw-design-engineer>.

<sup>14</sup> <https://www.apple.com/newsroom/2018/12/apple-to-build-new-campus-in-austin-and-add-jobs-across-the-us/>; <https://www.apple.com/newsroom/2019/11/apple-expands-in-austin/>;  
<https://communityimpact.com/austin/northwest-austin/technology/2020/05/21/revised-apple-campus-site-plan-in-northwest-austin-includes-new-6-story-hotel/>

Austin campus is the company's second largest physical campus and will include a 192-room hotel to house Apple employees who travel to Austin for work; three million square feet including two million square feet of office space (making it one of the world's largest office buildings); and a significant tax break from Williamson County for building this campus. This Austin location is a continuation of Apple's partnership with the Austin area that has existed for 30 years.

**Answer to FAC No. 9:** Apple admits that Apple press releases from 2018 and 2019 state that Apple would begin constructing a new campus in Austin, Texas, and that a "newly redesigned Mac Pro" would be manufactured in a factory in Austin. Apple admits that there are Apple facilities in this judicial district, but denies that these facilities have any connection to this case. Apple denies that the accused functionalities are developed in this District or that witnesses with relevant knowledge of the accused functionalities are located in this District. Apple further denies that venue in this District is convenient, and Apple reserves the right to seek transfer to a more appropriate or convenient forum. To the extent a response is required for the remaining allegations of paragraph 9 of the FAC, Apple denies them.

**FAC No. 10:** Apple additionally operates a research lab in Austin trying to figure out ways to recycle iPhones.<sup>15</sup>

**Answer to FAC No. 10:** Apple admits that it operates a facility in Austin, which among other things, is dedicated to discovering future recycling processes. Apple denies that the accused functionalities are developed in this District or that witnesses with relevant knowledge of the accused functionalities are located in this District. Apple further denies that venue in this

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<sup>15</sup> <https://www.cnet.com/news/apple-is-opening-up-its-world-of-iphone-recycling/>;  
<https://appleinsider.com/articles/19/04/18/apple-increases-recycling-program-efforts-ahead-of-earth-day>



District is convenient, and Apple reserves the right to seek transfer to a more appropriate or convenient forum. Apple denies the remaining allegations of paragraph 10 of the FAC.

#### **ASSERTED PATENTS**

**FAC No. 11:** On June 18, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,467,366 (“the ’366 patent”), entitled “Methods and Apparatus for Random Access in Multi-Carrier Communication Systems.” A copy of the ’366 patent is attached as Exhibit A.

**Answer to FAC No. 11:** Apple admits that U.S. Patent No. 8,467,366 is titled “Methods and Apparatus for Random Access in Multi-Carrier Communication Systems” and lists the issue date on the face of the patent as June 18, 2013. Apple denies that the ’366 patent was properly issued. Apple admits that what appears on its face to be a copy of the ’366 patent is attached to the FAC as Exhibit A.

**FAC No. 12:** The ’366 patent issued from U.S. Patent Application 13/205,579, which was assigned from the inventors to Waltical Solutions, Inc. on April 8, 2005. The application was later assigned from Waltical Solutions, Inc. to Neocific, Inc. on December 14, 2005. The now-issued ’366 patent was assigned from Neocific, Inc. to CFIP NCF LLC on November 22, 2019 before it was assigned to Neo Wireless LLC on January 23, 2020.

**Answer to FAC No. 12:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 12, and therefore denies them.

**FAC No. 13:** The ’366 patent is valid and enforceable.

**Answer to FAC No. 13:** Apple denies the allegations of paragraph 13 of the FAC.

**FAC No. 14:** On August 7, 2018, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,044,517 (“the ’517 patent”), entitled “Method and

Apparatus for Cellular Broadcasting and Communication System.” A copy of the ’517 patent is attached as Exhibit B.

**Answer to FAC No. 14:** Apple admits that U.S. Patent No. 10,044,517 is titled “Methods and Apparatus for Cellular Broadcasting and Communication System” and lists the issue date on the face of the patent as August 7, 2018. Apple denies that the ’517 patent was properly issued. Apple admits that what appears on its face to be a copy of the ’517 patent is attached to the FAC as Exhibit B.

**FAC No. 15:** The ’517 patent issued from U.S. Patent Application 14/160,420, which was filed by Neocific, Inc. on January 21, 2014. The now-issued ’517 patent was assigned from Neocific, Inc. to CFIP NCF LLC on November 22, 2019 before it was assigned to Neo Wireless LLC on January 23, 2020.

**Answer to FAC No. 15:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 15, and therefore denies them.

**FAC No. 16:** The ’517 patent is valid and enforceable.

**Answer to FAC No. 16:** Apple denies the allegations of paragraph 16 of the FAC.

**FAC No. 17:** On April 17, 2018, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,833,908 (“the ’908 patent”), entitled “Channel Probing Signal for a Broadband Communication System.” A copy of the ’908 patent is attached as Exhibit C.

**Answer to FAC No. 17:** Apple admits that U.S. Patent No. 10,833,908 is titled “Channel Probing Signal for a Broadband Communication System.” Apple denies the remaining allegations of paragraph 17 of the FAC, and denies that the ’908 patent was properly issued.

Apple admits that what appears on its face to be a copy of the '908 patent is attached to the FAC as Exhibit C.

**FAC No. 18:** The '908 patent issued from U.S. Patent Application 16/902,740, which was filed by Neo Wireless LLC on behalf of the inventors.

**Answer to FAC No. 18:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 18, and therefore denies them.

**FAC No. 19:** The '908 patent is valid and enforceable.

**Answer to FAC No. 19:** Apple denies the allegations of paragraph 19 of the FAC.

**FAC No. 20:** On September 11, 2018, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,075,941 ("the '941 patent"), entitled "Methods and Apparatus for Multi-Carrier Communications With Adaptive Transmission and Feedback." A copy of the '941 patent is attached as Exhibit D.

**Answer to FAC No. 20:** Apple admits that U.S. Patent No. 10,075,941 lists the issue date on the face of the patent as September 11, 2018. Apple denies the remaining allegations of paragraph 20 of the FAC, and denies that the '941 patent was properly issued. Apple admits that what appears on its face to be a copy of the '941 patent is attached to the FAC as Exhibit D.

**FAC No. 21:** The '941 patent issued from U.S. Patent Application 15/082,878, which filed by Neocific, Inc. on March 28, 2016. The now-issued '941 patent was assigned from Neocific, Inc. to CFIP NCF LLC on November 22, 2019 before it was assigned to Neo Wireless LLC on January 23, 2020.

**Answer to FAC No. 21:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 21, and therefore denies them.

**FAC No. 22:** The '941 patent is valid and enforceable.

**Answer to FAC No. 22:** Apple denies the allegations of paragraph 22 of the FAC.

**FAC No. 23:** On October 15, 2019, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,447,450 (“the ’450 patent”), entitled “Method and System for Multi-Carrier Packet Communication with Reduced Overhead.” A copy of the ’450 patent is attached as Exhibit E.

**Answer to FAC No. 23:** Apple admits that U.S. Patent No. 10,447,450 is titled “Method and System for Multi-Carrier Packet Communication with Reduced Overhead” and lists the issue date on the face of the patent as October 15, 2019. Apple denies that the ’450 patent was properly issued. Apple admits that what appears on its face to be a copy of the ’450 patent is attached to the FAC as Exhibit E.

**FAC No. 24:** The ’450 patent issued from U.S. Patent Application 15/676,421, which was filed by Neocific, Inc. on August 14, 2017. The now-issued ’450 patent was later assigned from Neocific, Inc. to CFIP NCF LLC on November 22, 2019 before it was assigned to Neo Wireless LLC on January 23, 2020.

**Answer to FAC No. 24:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 24, and therefore denies them.

**FAC No. 25:** The ’450 patent is valid and enforceable.

**Answer to FAC No. 25:** Apple denies the allegations of paragraph 25 of the FAC.

**FAC No. 26:** Neo Wireless owns all rights, title, and interest in and to each of the ’366, ’517, ’908, ’941, and ’450 patents (the “patents-in-suit”) and possesses all rights of recovery.

**Answer to FAC No. 26:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 26, and therefore denies them.

## FACTUAL ALLEGATIONS

**FAC No. 27:** Inventor Xiaodong (Alex) Li, Ph.D. founded Neocific Inc. in the early 2000s to design, develop, and implement a new wireless communication system. He and his co-inventors had extensive experience with wireless communications systems, including the development of the Wi-Max standards, and a deep understanding of the flaws in existing systems at the time. The inventors saw an opportunity to create a new wireless communication system meant to address those flaws while incorporating cutting-edge Orthogonal Frequency-Division Multiple Access (OFDMA) based technologies, and, starting in the 2004-2005 timeframe, they filed patents on the work.

**Answer to FAC No. 27:** Apple denies the statements and allegations of paragraph 27 insofar as they contain opinions rather than factual assertions, and therefore, require no response. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in paragraph 27, and therefore denies them.

**FAC No. 28:** Dr. Li served as the President and Founder of Neocific. Dr. Li obtained his Ph. D. in electrical engineering from the University of Washington, his M.S. from Shanghai Jiao Tong University, and his B.S. from Tsinghua University. Dr. Li has authored more than 30 journal and conference papers in wireless communications, video coding, and networking. He has been granted more than 100 U.S. and foreign patents.

**Answer to FAC No. 28:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 28, and therefore denies them.

**FAC No. 29:** Dr. Titus Lo, Ph.D. is a founding employee of Neocific. Dr. Lo obtained his Ph.D. in electrical engineering from McMaster University and his B.S. from the University of British Columbia. Dr. Lo has authored more than 30 technical papers in international peer-

reviewed journals and presented more than 50 time at industry events. He has been granted more than 100 U.S. and foreign patents.

**Answer to FAC No. 29:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 29, and therefore denies them.

**FAC No. 30:** Neo Wireless owns all substantial right, title, and interest in the patents-in-suit, and holds the right to sue and recover damages for infringement thereof.

**Answer to FAC No. 30:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 30, and therefore denies them.

**FAC No. 31:** David Loo is the CEO of Plaintiff Neo Wireless. Mr. Loo works and resides in Wayne, Pennsylvania. Mr. Loo has over a decade of experience as a licensing executive and patent attorney with a well-established track record of assisting companies, inventors and patent holders to ensure they are fairly compensated for their inventions.

**Answer to FAC No. 31:** Apple denies the statements and allegations of paragraph 31 insofar as they contain opinions rather than factual assertions, and therefore, require no response. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in paragraph 31, and therefore denies them.

**FAC No. 32:** The wireless communication industry has been developing rapidly since Bell Labs developed the First Generation of modern commercial cellular technology in 1984. Multiple wireless communication technologies designated by generations emerged and brought new capacities to people all over the world. In 2008, The 3rd Generation Partnership Project (“3GPP”) created and finalized the LTE standards as an upgrade to 3G. The cellular industry recognized its major benefits, and virtually all cellular device manufacturers, including Apple,

have embraced LTE as the next generation of commercial cellular technology and developed phones and other cellular devices to utilize the 4G LTE technology.

**Answer to FAC No. 32:** Apple denies the statements and allegations of paragraph 32 insofar as they contain opinions rather than factual assertions, and therefore, require no response. To the extent any remaining allegations set forth in paragraph 32 require a response, Apple denies them.

**FAC No. 33:** Defendant Apple is a multinational company that is noted for its flagship product, the iPhone, which is designed in and sold throughout the United States. The iPhone has brought great success to Apple. In 2019 alone, Apple reported a \$167 billion revenue from the sales of iPhone.

**Answer to FAC No. 33:** Apple admits that it is a multinational company and that it sells a product known as the iPhone from which it generates revenue, which is designed in and sold in the United States. To the extent any remaining allegations in paragraph 33 of the FAC require a response, Apple denies them.

**FAC No. 34:** The iPhone is set up to use multiple cellular networks, such as LTE or 4G and New Radio (“NR”) or 5G. In 2012, Apple announced the iPhone 5, which was its first smartphone to support 4G LTE connectivity. Over five million units of iPhone 5 were sold within three days after its launch. Thereafter, Apple announced iPhone 5C, iPhone 5S, iPhone SE, iPhone 6, iPhone 6 Plus, iPhone 6S, iPhone 6S Plus, iPhone 7, iPhone 7 Plus, iPhone 8, iPhone 8 Plus, iPhone X, iPhone XS, iPhone XR, iPhone 11, iPhone 11 Pro, and iPhone 11 Max, all with 4G LTE capabilities.

**Answer to FAC No. 34:** Apple admits that it introduced the iPhone 5 in 2012, that the iPhone 5 is capable of supporting a connection that is compatible with a 4G LTE network, and

that since 2012, Apple has released various additional versions of the iPhone that are capable of supporting a connection that is compatible with a 4G LTE network. To the extent the remaining allegations of paragraph 34 of the FAC require a response, Apple denies them and denies that any version of the iPhone infringes any valid claim of the Asserted Patents.

**FAC No. 35:** To utilize LTE or 4G and NR or 5G networks, the iPhone is manufactured to comply with wireless standards, such as the 3GPP standards, that ensure compatibility of wireless devices and wireless networks. Other cellular-capable devices of Apple, such as the iPad, iPad Air, iPad mini, iPad Pro, and Apple Watch, are designed to ensure compliance with the 3GPP standards as well.

**Answer to FAC No. 35:** Apple admits that some of Apple's cellular-capable devices are configured to operate in wireless networks that support certain portions of the 3GPP standards, in addition to other communications standards and protocols. To the extent any remaining allegations of paragraph 35 of the FAC require a response, Apple denies them and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 36:** Apple has been on notice of the asserted patents since at least the filing and/or service of this Complaint. Apple has known that the acts complained of below constituted infringement of the asserted patents, or at least subjectively believed there was a high probability of infringement of the asserted patents but took deliberate steps to avoid confirming the same.

**Answer to FAC No. 36:** Apple admits that it has been served with the original Complaint in Case No. 6:21-cv-00026 asserting infringement of the '366, '908, '941, and '451 patents. Apple admits that it was served with the First Amended Complaint on April 28, 2021 asserting infringement of the '517 patent. Apple denies the remaining allegations of paragraph



36 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 37:** As described above, the asserted patents read on portions of the LTE or 4G and NR or 5G standards, which Apple implements in its products (“Apple’s Accused Instrumentalities”), such as its iPhone products and other cellular-capable devices. Apple makes, uses, sells, offers to sell and/or imports these Accused Instrumentalities in the United States. Accordingly, Apple directly and indirectly infringes each of patents-in-suit.

**Answer to FAC No. 37:** Apple admits that some of Apple’s cellular-capable devices are configured to operate in wireless networks that support certain portions of the 3GPP standards, in addition to other communications standards and protocols. Apple denies the remaining allegations of paragraph 37 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 38:** Apple does not have any rights to the patents-in-suit.

**Answer to FAC No. 38:** Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 38, and therefore denies them.

**FAC No. 39:** In the interest of providing detailed averments of infringement, Neo Wireless has identified below at least one claim per patent to demonstrate infringement. However, the selection of claims should not be considered limiting, and additional claims of the patents-in-suit (including method, system, and apparatus claims) that are infringed by Apple will be disclosed in compliance with the Court’s rules related to infringement contentions.

**Answer to FAC No. 39:** Paragraph 39 does not contain allegations that call for a response. To the extent that paragraph 39 alleges any fact to which a response is required, Apple denies them.

**COUNT ONE: INFRINGEMENT OF THE '366 PATENT**

**FAC No. 40:** Neo Wireless incorporates by reference the preceding paragraphs as if fully set forth herein.

**Answer to FAC No. 40:** Apple repeats and incorporates each and every response to the allegations in the foregoing paragraphs as if set forth herein.

**FAC No. 41:** As described above, Defendant Apple has infringed and continues to infringe the patents-in-suit by implementing certain cellular standards, including particular 3GPP standards, into its products.

**Answer to FAC No. 41:** Apple denies the allegations of paragraph 41 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 42:** Apple directly infringes the '366 patent because it has made, used, sold, offered to sell and/or imported its Accused Instrumentalities in the United States. For example, each of Apple's Accused Instrumentalities implements the portions of the 3GPP LTE standard specification that read on at least claim 1 the '366 patent. See Exhibit F.

**Answer to FAC No. 42:** Apple denies the allegations of paragraph 42 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 43:** Apple's Accused Instrumentalities meet at least one claim of the '366 patent.

**Answer to FAC No. 43:** Apple denies the allegations of paragraph 43 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 44:** Apple makes, uses, offers to sell, sells, and imports Apple's Accused Instrumentalities within the United States or into the United States without authority from Neo Wireless.

**Answer to FAC No. 44:** Apple denies the allegations of paragraph 44 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 45:** Apple therefore infringes the '366 patent under 35 U.S.C. § 271(a).

**Answer to FAC No. 45:** Apple denies the allegations of paragraph 45 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 46:** Apple indirectly infringes the '366 patent by inducing infringement by others, such as end-user customers, by, for example, encouraging its users to take advantage of LTE features within the United States and by implementing the standardized features in its cellular-capable devices.

**Answer to FAC No. 46:** Apple denies the allegations of paragraph 46 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 47:** Apple took the above actions intending to cause infringing acts by others.

**Answer to FAC No. 47:** Apple denies the allegations of paragraph 47 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 48:** Apple received actual notice of its infringement of the '366 patent at least as early as the date of service of Complaint. Therefore, Apple was or is now aware of the '366 patent or has willfully blinded itself as to the existence of the '366 patent and made, used, sold, offered to sell, imported and/or encouraged the making, using, selling, offering to sell, or importing of the Accused Products despite knowing of an objectively high likelihood that its actions constituted infringement of the '366 patent at all times relevant to this suit.

Alternatively, Apple subjectively believed there was a high probability that others would infringe the '366 patent but took deliberate steps to avoid confirming that it was actively inducing infringement by others. Apple therefore infringes the patents-in-suit under 35 U.S.C. § 271(b).

**Answer to FAC No. 48:** Apple admits that it has been served with the original Complaint in Case No. 6:21-cv-00026 asserting infringement of the '366 patent. Apple denies the remaining allegations of paragraph 48 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 49:** Apple indirectly infringes the '366 patent by contributing to infringement by others, such as end-user customers by offering to sell and selling within the United States components (that is, the Accused Instrumentalities) that constitute a material part of the inventions claimed in the '366 patent, and that are used to practice one or more processes/methods covered by the claims of the '366 patent. Apple's end-user customers directly infringe the '366 patent by, for example, using the cellular functionality of Apple's Accused Instrumentalities, including establishing communication with the cellular wireless network and contending for access to resources on the network.

**Answer to FAC No. 49:** Apple denies the allegations of paragraph 49 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 50:** In offering to sell and selling the components specified above, Apple has known these components to be especially made or especially adapted for use in an infringement of the '366 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use. Alternatively, Apple subjectively believed there was a high probability that these components to be especially made or especially adapted for use in an infringement of the '366 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use, but took deliberate steps to avoid confirming the same. Apple therefore infringes the '366 patent under 35 U.S.C. § 271(c).

**Answer to FAC No. 50:** Apple denies the allegations of paragraph 50 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

**FAC No. 51:** To the extent that Apple releases any new version of Apple's Accused Instrumentalities, such instrumentalities will meet the claims of the '366 patent and infringe under 35 U.S.C. § 271(a)-(c) in ways analogous to Apple's current infringement described above.

**Answer to FAC No. 51:** Apple denies the allegations of paragraph 51 of the FAC and denies that any of its products infringe or will infringe any valid claim of the '366 patent.

**FAC No. 52:** Neo Wireless has been damaged and continues to be damaged by each of Apple's infringement of the '366 patent.

**Answer to FAC No. 52:** Apple denies the allegations of paragraph 52 of the FAC and denies that any of its products infringe any valid claim of the '366 patent.

## **COUNT TWO: INFRINGEMENT OF THE '517 PATENT**

**FAC No. 53:** Neo Wireless incorporates by reference the preceding paragraphs as if fully set forth herein.

**Answer to FAC No. 53:** Apple repeats and incorporates each and every response to the allegations in the foregoing paragraphs as if set forth herein.

**FAC No. 54:** As described above, Defendant Apple has infringed and continues to infringe the patents-in-suit by implementing certain cellular standards, including particular 3GPP standards, into its products.

**Answer to FAC No. 54:** Apple denies the allegations of paragraph 54 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 55:** Apple directly infringes the '517 patent because it has made, used, sold, offered to sell and/or imported its respective Accused Instrumentalities in the United States. For

example, each of the Apple's Accused Instrumentalities implements the portions of the 3GPP LTE standard specification that read on at least claim 13 the '517 patent. See Exhibit G.

**Answer to FAC No. 55:** Apple denies the allegations of paragraph 55 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 56:** Apple's Accused Instrumentalities meet at least one claim of the '517 patent.

**Answer to FAC No. 56:** Apple denies the allegations of paragraph 56 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 57:** Apple makes, uses, offers to sell, sells, and imports Apple's Accused Instrumentalities within the United States or into the United States without authority from Neo Wireless.

**Answer to FAC No. 57:** Apple denies the allegations of paragraph 57 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 58:** Apple therefore infringes the '517 patent under 35 U.S.C. § 271(a).

**Answer to FAC No. 58:** Apple denies the allegations of paragraph 58 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 59:** Apple indirectly infringes the '517 patent by inducing infringement by others, such as end-user customers, by, for example, encouraging its users to take advantage of LTE features within the United States and by implementing the standardized features in its cellular-capable devices.

**Answer to FAC No. 59:** Apple denies the allegations of paragraph 59 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 60:** Apple took the above actions intending to cause infringing acts by others.

**Answer to FAC No. 60:** Apple denies the allegations of paragraph 60 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 61:** Apple received actual notice of its infringement of the '517 patent at least as early as the date of service of Complaint. Therefore, Apple was or is now aware of the '517 patent or has willfully blinded itself as to the existence of the '517 patent and made, used, sold, offered to sell, imported and/or encouraged the making, using, selling, offering to sell, or importing of the Accused Products despite knowing of an objectively high likelihood that its actions constituted infringement of the '517 patent at all times relevant to this suit.

Alternatively, Apple subjectively believed there was a high probability that others would infringe the '517 patent but took deliberate steps to avoid confirming that it was actively inducing infringement by others. Apple therefore infringes the '517 patent under 35 U.S.C. § 271(b).

**Answer to FAC No. 61:** Apple admits that it has been served with the FAC in Case No. 6:21-cv-00026 asserting infringement of the '517 patent. Apple denies the remaining allegations of paragraph 61 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 62:** Apple indirectly infringes the '517 patent by contributing to infringement by others, such as end-user customers by offering to sell and selling within the United States components (that is, the Accused Instrumentalities) that constitute a material part of the inventions claimed in the '517 patent, and that are used to practice one or more processes/methods covered by the claims of the '517 patent. Apple's end-user customers directly infringe the '517 patent by, for example, using the cellular functionality of Apple's Accused Instrumentalities, including establishing communication with the cellular wireless network and contending for access to resources on the network.

**Answer to FAC No. 62:** Apple denies the allegations of paragraph 62 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 63:** In offering to sell and selling the components specified above, Apple has known these components to be especially made or especially adapted for use in an infringement of the '517 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use. Alternatively, Apple subjectively believed there was a high probability that these components to be especially made or especially adapted for use in an infringement of the '517 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use, but took deliberate steps to avoid confirming the same. Apple therefore infringes the '517 patent under 35 U.S.C. § 271(c).

**Answer to FAC No. 63:** Apple denies the allegations of paragraph 63 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.

**FAC No. 64:** To the extent that Apple releases any new version of Apple's Accused Instrumentalities, such instrumentalities will meet the claims of the '517 patent and infringe under 35 U.S.C. § 271(a)-(c) in ways analogous to Apple's current infringement described above.

**Answer to FAC No. 64:** Apple denies the allegations of paragraph 64 of the FAC and denies that any of its products infringe or will infringe any valid claim of the '517 patent.

**FAC No. 65:** Neo Wireless has been damaged and continues to be damaged by each of Apple's infringement of the '517 patent.

**Answer to FAC No. 65:** Apple denies the allegations of paragraph 65 of the FAC and denies that any of its products infringe any valid claim of the '517 patent.



**COUNT THREE: INFRINGEMENT OF THE '908 PATENT**

**FAC No. 66:** Neo Wireless incorporates by reference the preceding paragraphs as if fully set forth herein.

**Answer to FAC No. 66:** Apple repeats and incorporates each and every response to the allegations in the foregoing paragraphs as if set forth herein.

**FAC No. 67:** As described above, Defendant Apple has infringed and continues to infringe the patents-in-suit by implementing certain cellular standards, including particular 3GPP standards, into its products.

**Answer to FAC No. 67:** Apple denies the allegations of paragraph 67 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 68:** Apple directly infringes the '908 patent because it has made, used, sold, offered to sell and/or imported its respective Accused Instrumentalities in the United States. For example, each of Apple's Accused Instrumentalities implements the portions of the 3GPP LTE standard specification that read on at least claim 11 the '908 patent. See Exhibit H.

**Answer to FAC No. 68:** Apple denies the allegations of paragraph 68 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 69:** Apple's Accused Instrumentalities meet at least one claim of the '908 patent.

**Answer to FAC No. 69:** Apple denies the allegations of paragraph 69 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 70:** Apple makes, uses, offers to sell, sells, and imports Apple's Accused Instrumentalities within the United States or into the United States without authority from Neo Wireless.

**Answer to FAC No. 70:** Apple denies the allegations of paragraph 70 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 71:** Apple therefore infringes the '908 patent under 35 U.S.C. § 271(a).

**Answer to FAC No. 71:** Apple denies the allegations of paragraph 71 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 72:** Apple indirectly infringes the '908 patent by inducing infringement by others, such as end-user customers, by, for example, encouraging its users to take advantage of LTE features within the United States and by implementing the standardized features in its cellular-capable devices.

**Answer to FAC No. 72:** Apple denies the allegations of paragraph 72 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 73:** Apple took the above actions intending to cause infringing acts by others.

**Answer to FAC No. 73:** Apple denies the allegations of paragraph 73 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 74:** Apple received actual notice of its infringement of the '908 patent at least as early as the date of service of Complaint. Therefore, Apple was or is now aware of the '908 patent or has willfully blinded itself as to the existence of the '908 patent and made, used, sold, offered to sell, imported and/or encouraged the making, using, selling, offering to sell, or importing of the Accused Products despite knowing of an objectively high likelihood that its actions constituted infringement of the '908 patent at all times relevant to this suit.

Alternatively, Apple subjectively believed there was a high probability that others would infringe the '908 patent but took deliberate steps to avoid confirming that it was actively inducing infringement by others. Apple therefore infringes the '908 patent under 35 U.S.C. § 271(b).

**Answer to FAC No. 74:** Apple admits that it has been served with the original Complaint in Case No. 6:21-cv-00026 asserting infringement of the '908 patent. Apple denies the remaining allegations of paragraph 74 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 75:** Apple indirectly infringes the '908 patent by contributing to infringement by others, such as end-user customers by offering to sell and selling within the United States components (that is, the Accused Instrumentalities) that constitute a material part of the inventions claimed in the '908 patent, and that are used to practice one or more processes/methods covered by the claims of the '908 patent. Apple's end-user customers directly infringe the '908 patent by, for example, using the cellular functionality of Apple's Accused Instrumentalities, including establishing communication with the cellular wireless network and contending for access to resources on the network.

**Answer to FAC No. 75:** Apple denies the allegations of paragraph 75 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 76:** In offering to sell and selling the components specified above, Apple has known these components to be especially made or especially adapted for use in an infringement of the '908 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use. Alternatively, Apple subjectively believed there was a high probability that these components to be especially made or especially adapted for use in an infringement of the '908 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use, but took deliberate steps to avoid confirming the same. Apple therefore infringes the '908 patent under 35 U.S.C. § 271(c).

**Answer to FAC No. 76:** Apple denies the allegations of paragraph 76 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

**FAC No. 77:** To the extent that Apple releases any new version of Apple's Accused Instrumentalities, such instrumentalities will meet the claims of the '908 patent and infringe under 35 U.S.C. § 271(a)-(c) in ways analogous to Apple's current infringement described above.

**Answer to FAC No. 77:** Apple denies the allegations of paragraph 77 of the FAC and denies that any of its products infringe or will infringe any valid claim of the '908 patent.

**FAC No. 78:** Neo Wireless has been damaged and continues to be damaged by each of Apple's infringement of the '908 patent.

**Answer to FAC No. 78:** Apple denies the allegations of paragraph 78 of the FAC and denies that any of its products infringe any valid claim of the '908 patent.

#### **COUNT FOUR: INFRINGEMENT OF THE '941 PATENT**

**FAC No. 79:** Neo Wireless incorporates by reference the preceding paragraphs as if fully set forth herein.

**Answer to FAC No. 79:** Apple repeats and incorporates each and every response to the allegations in the foregoing paragraphs as if set forth herein.

**FAC No. 80:** As described above, Defendant Apple has infringed and continues to infringe the patents-in-suit by implementing certain cellular standards, including particular 3GPP standards, into its products.

**Answer to FAC No. 80:** Apple denies the allegations of paragraph 80 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 81:** Apple directly infringes the '941 patent because it has made, used, sold, offered to sell and/or imported its respective Accused Instrumentalities in the United States. For

example, each of Apple's Accused Instrumentalities implements the portions of the 3GPP LTE standard specification that read on at least claim 13 the '941 patent. See Exhibit I.

**Answer to FAC No. 81:** Apple denies the allegations of paragraph 81 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 82:** Apple's Accused Instrumentalities meet at least one claim of the '941 patent.

**Answer to FAC No. 82:** Apple denies the allegations of paragraph 82 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 83:** Apple makes, uses, offers to sell, sells, and imports Apple's Accused Instrumentalities within the United States or into the United States without authority from Neo Wireless.

**Answer to FAC No. 83:** Apple denies the allegations of paragraph 83 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 84:** Apple therefore infringes the '941 patent under 35 U.S.C. § 271(a).

**Answer to FAC No. 84:** Apple denies the allegations of paragraph 84 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 85:** Apple indirectly infringes the '941 patent by inducing infringement by others, such as end-user customers, by, for example, encouraging its users to take advantage of LTE features within the United States and by implementing the standardized features in its cellular-capable devices.

**Answer to FAC No. 85:** Apple denies the allegations of paragraph 85 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 86:** Apple took the above actions intending to cause infringing acts by others.

**Answer to FAC No. 86:** Apple denies the allegations of paragraph 86 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 87:** On information and belief, Apple was aware of the '941 patent prior to the filing of this lawsuit.

**Answer to FAC No. 87:** Apple denies the allegations of paragraph 87 of the FAC.

**FAC No. 88:** Apple patent U.S. 8,547,861 cites to related patents or patent applications in the '941 patent family.

**Answer to FAC No. 88:** Apple is unable to determine from the description in paragraph 88 to which patents or patent applications Plaintiff is referring, and therefore denies the allegations in paragraph 88 of the FAC.

**FAC No. 89:** Apple received actual notice of its infringement of the '941 patent at least as early as the date of service of Complaint. Therefore, Apple was or is now aware of the '941 patent or has willfully blinded itself as to the existence of the '941 patent and made, used, sold, offered to sell, imported and/or encouraged the making, using, selling, offering to sell, or importing of the Accused Products despite knowing of an objectively high likelihood that its actions constituted infringement of the '941 patent at all times relevant to this suit.

Alternatively, Apple subjectively believed there was a high probability that others would infringe the '941 patent but took deliberate steps to avoid confirming that it was actively inducing infringement by others. Apple therefore infringes the '941 patent under 35 U.S.C. § 271(b).

**Answer to FAC No. 89:** Apple admits that it has been served with the original Complaint in Case No. 6:21-cv-00026 asserting infringement of the '941 patent. Apple denies the remaining allegations of paragraph 89 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 90:** Apple indirectly infringes the '941 patent by contributing to infringement by others, such as end-user customers by offering to sell and selling within the United States components (that is, the Accused Instrumentalities) that constitute a material part of the inventions claimed in the '941 patent, and that are used to practice one or more processes/methods covered by the claims of the '941 patent. Apple's end-user customers directly infringe the '941 patent by, for example, using the cellular functionality of Apple's Accused Instrumentalities, including establishing communication with the cellular wireless network and contending for access to resources on the network.

**Answer to FAC No. 90:** Apple denies the allegations of paragraph 90 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 91:** In offering to sell and selling the components specified above, Apple has known these components to be especially made or especially adapted for use in an infringement of the '941 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use. Alternatively, Apple subjectively believed there was a high probability that these components to be especially made or especially adapted for use in an infringement of the '941 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use, but took deliberate steps to avoid confirming the same. Apple therefore infringes the '941 patent under 35 U.S.C. § 271(c).

**Answer to FAC No. 91:** Apple denies the allegations of paragraph 91 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

**FAC No. 92:** To the extent that Apple releases any new version of Apple's Accused Instrumentalities, such instrumentalities will meet the claims of the '941 patent and infringe

under 35 U.S.C. § 271(a)-(c) in ways analogous to Apple's current infringement described above.

**Answer to FAC No. 92:** Apple denies the allegations of paragraph 92 of the FAC and denies that any of its products infringe or will infringe any valid claim of the '941 patent.

**FAC No. 93:** Neo Wireless has been damaged and continues to be damaged by each of Apple's infringement of the '941 patent.

**Answer to FAC No. 93:** Apple denies the allegations of paragraph 93 of the FAC and denies that any of its products infringe any valid claim of the '941 patent.

#### **COUNT FIVE: INFRINGEMENT OF THE '450 PATENT**

**FAC No. 94:** Neo Wireless incorporates by reference the preceding paragraphs as if fully set forth herein.

**Answer to FAC No. 94:** Apple repeats and incorporates each and every response to the allegations in the foregoing paragraphs as if set forth herein.

**FAC No. 95:** As described above, Defendant Apple has infringed and continues to infringe the patents-in-suit by implementing certain cellular standards, including particular 3GPP standards, into its products.

**Answer to FAC No. 95:** Apple denies the allegations of paragraph 95 of the FAC and denies that any of its products infringe any valid claim of the Asserted Patents.

**FAC No. 96:** Apple directly infringes the '450 patent because it has made, used, sold, offered to sell and/or imported its respective Accused Instrumentalities in the United States. For example, each of the Apple's Accused Instrumentalities implements the portions of the 3GPP LTE standard specification that read on at least claim 7 the '450 patent. See Exhibit J.

**Answer to FAC No. 96:** Apple denies the allegations of paragraph 96 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.



**FAC No. 97:** Apple's Accused Instrumentalities meet at least one claim of the '450 patent.

**Answer to FAC No. 97:** Apple denies the allegations of paragraph 97 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 98:** Apple makes, uses, offers to sell, sells, and imports Apple's Accused Instrumentalities within the United States or into the United States without authority from Neo Wireless.

**Answer to FAC No. 98:** Apple denies the allegations of paragraph 98 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 99:** Apple therefore infringes the '450 patent under 35 U.S.C. § 271(a).

**Answer to FAC No. 99:** Apple denies the allegations of paragraph 99 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 100:** Apple indirectly infringes the '450 patent by inducing infringement by others, such as end-user customers, by, for example, encouraging its users to take advantage of LTE features within the United States and by implementing the standardized features in its cellular-capable devices.

**Answer to FAC No. 100:** Apple denies the allegations of paragraph 100 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 101:** Apple took the above actions intending to cause infringing acts by others.

**Answer to FAC No. 101:** Apple denies the allegations of paragraph 101 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 102:** Apple received actual notice of its infringement of the '450 patent at least as early as the date of service of Complaint. Therefore, Apple was or is now aware of the '450

patent or has willfully blinded itself as to the existence of the '450 patent and made, used, sold, offered to sell, imported and/or encouraged the making, using, selling, offering to sell, or importing of the Accused Products despite knowing of an objectively high likelihood that its actions constituted infringement of the '450 patent at all times relevant to this suit.

Alternatively, Apple subjectively believed there was a high probability that others would infringe the '450 patent but took deliberate steps to avoid confirming that it was actively inducing infringement by others. Apple therefore infringes the '450 patent under 35 U.S.C. § 271(b).

**Answer to FAC No. 102:** Apple admits that it has been served with the original Complaint in Case No. 6:21-cv-00026 asserting infringement of the '450 patent. Apple denies the remaining allegations of paragraph 102 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 103:** Apple indirectly infringes the '450 patent by contributing to infringement by others, such as end-user customers by offering to sell and selling within the United States components (that is, the Accused Instrumentalities) that constitute a material part of the inventions claimed in the '450 patent, and that are used to practice one or more processes/methods covered by the claims of the '450 patent. Apple's end-user customers directly infringe the '450 patent by, for example, using the cellular functionality of Apple's Accused Instrumentalities, including establishing communication with the cellular wireless network and contending for access to resources on the network.

**Answer to FAC No. 103:** Apple denies the allegations of paragraph 103 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 104:** In offering to sell and selling the components specified above, Apple has known these components to be especially made or especially adapted for use in an infringement

of the '450 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use. Alternatively, Apple subjectively believed there was a high probability that these components to be especially made or especially adapted for use in an infringement of the '450 patent and that these components are not a staple article or commodity of commerce suitable for substantial non-infringing use, but took deliberate steps to avoid confirming the same. Apple therefore infringes the '450 patent under 35 U.S.C. § 271(c).

**Answer to FAC No. 104:** Apple denies the allegations of paragraph 104 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

**FAC No. 105:** To the extent that Apple releases any new version of Apple's Accused Instrumentalities, such instrumentalities will meet the claims of the '450 patent and infringe under 35 U.S.C. § 271(a)-(c) in ways analogous to Apple's current infringement described above.

**Answer to FAC No. 105:** Apple denies the allegations of paragraph 105 of the FAC and denies that any of its products infringe or will infringe any valid claim of the '450 patent.

**FAC No. 106:** Neo Wireless has been damaged and continues to be damaged by each of Apple's infringement of the '450 patent.

**Answer to FAC No. 106:** Apple denies the allegations of paragraph 106 of the FAC and denies that any of its products infringe any valid claim of the '450 patent.

### **JURY DEMAND**

The Jury Demand requires no response.

### **PRAYER FOR RELIEF**

The Prayer for Relief requires no response. To the extent any response is required, Apple denies that Plaintiff should be granted any of the relief requested.

### **GENERAL DENIAL**

To the extent any allegations in the FAC are not specifically admitted, Apple denies them.

### **AFFIRMATIVE DEFENSES**

Subject to the responses above, Apple alleges and asserts the following defenses in response to the allegations, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein. In addition to the defenses described below, subject to its responses above, Apple reserves the right to modify, amend, and/or expand upon these defenses as discovery proceeds, and to allege additional defenses that become known through the course of discovery.

#### **FIRST AFFIRMATIVE DEFENSE (Failure to State a Claim)**

The FAC fails to state a claim upon which relief can be granted.

#### **SECOND AFFIRMATIVE DEFENSE (Invalidity)**

The Asserted Patents are invalid for failure to satisfy the conditions of patentability as specified under one or more sections of Title 35 of the United States Code, including, without limitation, 35 U.S.C. §§ 101, 102, 103, and 112.

#### **THIRD AFFIRMATIVE DEFENSE (Non-Infringement)**

Apple does not and has not infringed any valid claim of the Asserted Patents either directly, contributorily, by way of inducement, literally, willfully, and/or under the doctrine of equivalents.

**FOURTH AFFIRMATIVE DEFENSE**  
**(Limitation on Damages)**

Plaintiff's claims for damages for infringement of the Asserted Patents are limited pursuant to 35 U.S.C. § 286.

**FIFTH AFFIRMATIVE DEFENSE**  
**(Patent Marking)**

Plaintiff's claims for damages for infringement of the Asserted Patents are limited by 35 U.S.C. § 287 to those damages occurring only after notice of infringement.

**SIXTH AFFIRMATIVE DEFENSE**  
**(Prosecution History Estoppel)**

By reason of the proceedings in the U.S. Patent and Trademark Office during the prosecution of the applications which resulted in the issuance of the Asserted Patents, Plaintiff is estopped from claiming a construction of one or more claims of the Asserted Patents that would cause any valid claim thereof to cover or include any product manufactured, used, sold, offered for sale, or imported by Apple.

**SEVENTH AFFIRMATIVE DEFENSE**  
**(Ensnarement)**

On information and belief, Plaintiff's infringement claims are barred by the doctrine of ensnarement. Plaintiff is foreclosed from asserting infringement under the doctrine of equivalents to the extent the scope of such equivalent would ensnare prior art.

**EIGHTH AFFIRMATIVE DEFENSE**  
**(28 U.S.C. § 285 – No Exceptional Case)**

Apple has engaged in all of its activities in good faith, and Plaintiff cannot prove that this is an exceptional case justifying an award of attorneys' fees against Apple pursuant to 28 U.S.C. § 285.

**NINTH AFFIRMATIVE DEFENSE**  
**(Prosecution Laches)**

Plaintiff's claims are barred in whole or in part because the Asserted Patents are invalid and/or unenforceable based on prosecution laches. The Asserted Patents issued after an unreasonable and unexplained delay in prosecution, and that delay in prosecution prejudiced Apple, including, for example, evidentiary and economic prejudice.

**RESERVATION OF ADDITIONAL DEFENSES**

Apple reserves the right to assert additional defenses which become apparent during discovery, including, but not limited to, the defenses of unclean hands, patent misuse, waiver, estoppel, disclaimer, and inequitable conduct.

**PRAYER FOR RELIEF**

WHEREFORE, Defendant Apple prays for relief as follows:

- A. That Plaintiff's FAC against Apple be dismissed in its entirety with prejudice and that a judgment be entered in favor of Apple and against Plaintiff;
- B. That Plaintiff take nothing by reason of its FAC;
- C. That the Court enter an order under 35 U.S.C. § 285, awarding Apple its reasonable attorney's fees and costs of suit incurred in this litigation, as Plaintiff's conduct as set forth above renders this an exceptional case; and
- D. That Apple be granted all such other and further relief as the Court deems just and proper.

**JURY DEMAND**

Apple demands a trial by jury on all claims and defenses so triable.

Dated: June 17, 2021

Respectfully submitted,

/s/ John M. Guaragna

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**ATTORNEYS FOR DEFENDANT  
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**CERTIFICATE OF SERVICE**

The undersigned certifies that on this 17th day of June 2021, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(b)(1). Any other counsel of record will be served by a facsimile transmission and/or first class mail.

/s/ John M. Guaragna  
John M. Guaragna